ABSTRACT Cyan Inks And Their Use In Ink-Jet Printers

A composition comprising:

5 (a) a major dye component which is a mixture of copper phthalocyanine dyes of Formula (1):

CuPc
$$\beta$$
-(SO₃M)_x β -(SO₂NH₂)_y
Formula (1)

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wherein:

Pc represents a phthalocyanine nucleus of formula;

$$\beta \xrightarrow{\beta} \alpha \xrightarrow{N} N \xrightarrow{\alpha} \beta \xrightarrow{\beta} \beta$$

$$N \xrightarrow{N} N \xrightarrow{N} N \xrightarrow{\alpha} \beta$$

$$\beta \xrightarrow{\beta} \alpha \xrightarrow{N} N \xrightarrow{\alpha} \beta$$

15

25

M is a cation;

x and y each independently have an average value of from 0.5 to 3.5;

20 (x+y) = 4; and

the sulfo and sulfonamide substituents are attached to a $\beta\mbox{-position}$ on the phthalocyanine ring; and

(b) a liquid medium which comprises water and an organic solvent or an organic solvent free from water. Also ink-jet printing processes, printed images, ink-jet printers and ink-jet cartridges.